Natural Resources

Nova Scotia Department of Natural Resources

Annual Accountability Report For The Fiscal Year 2002-03

Report DNR 2003–3
December 2003

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1. Accountability Statement

The accountability report of the Department of Natural Resources, for the year ended March 31, 2003, is prepared pursuant to the *Provincial Finance Act* and government policy and guidelines. These authorities require the reporting of outcomes against (Natural Resources') business plan information for the fiscal year 2002-03.

The reporting of department outcomes necessarily includes estimates, judgments and opinions by department management and staff. We acknowledge that this accountability report is the responsibility of department management. The report is, to the extent possible, a complete and accurate representation of outcomes relative to the goals and priorities set out in the department's business plan for the year.

original signed by Richard Hurlburt
Minister

original signed by Dan Graham
Deputy Minister

2. Message From The Minister

The department's Annual Accountability Report covers the year that ended on March 31, 2003, and was prepared under my direction on behalf of the department. We are providing a report, along with every other department, to show our performance during the past fiscal year. This is the department's third accountability report, which is mandated under the *Provincial Finance Act*. This report provides Nova Scotians with an opportunity to compare our 2002-03 accomplishments to the commitments that we made in our 2002-03 Business Plan.

During 2002-03 the department made a number of significant accomplishments related to land acquisition, biodiversity and sustainability of our resource base. Several of the most noteworthy accomplishments are provided below:

- the acquisition of Cape Split, one of the province's most beautiful and recognizable landscapes;
- the designation of McNabs and Lawlor Islands as a provincial park;
- the extension of an agreement with the Nature Conservancy of Canada to allow the province to acquire private land with outstanding ecological values; and
- work done to ensure the future sustainability of our forests, such as the agreement with the Association for Sustainable Forestry to carry out silviculture work on small private woodlots.

Although I was only appointed Minister of Natural Resources in August 2003, I have quickly become aware of the department's wide range of responsibilities. The many achievements made over the last year show how the department, and the government, is committed to the sustainable management of our natural resources and to sound administration of our Crown land. As Minister, I am anxious to address the challenges that lie ahead and look forward to reporting on our accomplishments a year from now.

3. Introduction

This document reports on the priorities and performance measures identified in the department's 2002-03 business plan, which can be accessed at http://www.gov.ns.ca/natr/businessplan/default.htm.

There are two purposes to this document. First, the document allows the department to meet our legislated responsibility for outcomes reporting required under the *Provincial Finance Act*. Second, and most importantly, the document allows the department to show its accomplishments and results achieved.

The principal responsibility of the department is the management of natural resources (forests, wildlife, minerals, parks) and Crown lands in the province. There are several facts readers should be aware of when reviewing this document.

First, Nova Scotia has the second lowest proportion of Crown lands of all provinces and territories, at approximately 28% of the province's land mass. There are strong public expectations and numerous competing demands for the use and purpose of this limited public land and resource base. Although the province has acquired several very significant properties during the year, the fact remains that a relatively small proportion of the province is publicly owned.

Second, the unpredictability of nature is a continuous influence on departmental operations. Weather patterns and climatic conditions vary greatly from year to year, which affects departmental priorities, resources and budgets. Forest fires, insect infestations, wildlife and forest health, and park attendance are all affected by the weather.

Third, due to the location of the majority of our natural resources, the department has a higher profile in the province's rural areas, and a more rural focus. Our foundation industries are key contributors to the economic health of the province, particularly in the rural parts of Nova Scotia. There is an ongoing need for the department to heighten public awareness and understanding, particularly among urban populations, regarding the economic importance of our natural resources to rural populations and the province of Nova Scotia, and how the sustainable management of our resources is carried out.

Finally, the department has seen significant reductions in budget and staffing levels since the mid-1990s. Adjusted for inflation, the department's budget has shrunk by approximately a third over the last decade. Effectively delivering the services required to fulfill the department's mandate is an increasingly difficult challenge with fewer staff and reduced financial resources. There is a continuing need to maintain key / essential aging infrastructure required for the department's operations.

There were two restructuring initiatives that occurred during the year. In June 2002, the department's energy-related responsibilities were transferred to the newly created Department of Energy. In November 2002, responsibility for the Integrated Mobile Radio System was transferred to the Department of Transportation and Public Works.

4. Department Progress and Accomplishments

The department's broad goals that were included in the 2002-03 Business Plan are listed below. These are to:

- achieve sound natural resources stewardship;
- conserve the diversity of Nova Scotia's natural environment;
- support Nova Scotia's economy through the sustainable development of natural resources;
- improve the quality of life in Nova Scotia; and
- manage the department's financial, physical, human, and information resources effectively and efficiently.

The department's activities were allocated to one of three core business areas. These core business areas were:

- Natural Resources Management and Use;
- Crown Lands Administration; and
- Infrastructure and Support Services.

Note that in the 2003-04 Business Plan, the first core business area, Natural Resources Management and Use has been restated as simply Natural Resources Management.

The following paragraphs report on accomplishments during 2002-03 for each of the priorities listed for each of the three core business areas in the department's 2002-03 Business Plan.

a) Natural Resources Management and Use

- Continue to Implement the Forest Strategy

  The Forest Strategy consists of nine major policy, program and regulatory elements, the focus of which is on achieving sustainable forestry and forest use in the province. In 1998, changes were made to the *Forests Act* to introduce the concept of sustainable forestry and to provide the authority needed to implement the Forest Strategy.

  New *Wildlife Habitat and Watercourses Protection Regulations* became effective in January 2002. During 2002-03, meetings to explain the Regulations were held with DNR staff, industry groups, contractors and landowners, as well as individual contacts with contractors. Brochures were produced and distributed through industry organizations' mail-outs. A field workshop with other federal and provincial departments gave a better understanding of mutual concerns and allowed planning to coordinate extension and enforcement efforts. Staff responded to many public complaints about harvesting practices and where necessary, took appropriate extension or enforcement action.

  In December 2002, an amendment was made to these Regulations by Order-In-Council granting an exemption to established Christmas tree operations and persons clearing land for non-forest purposes.

  The final draft of the Code of Forest Practice principle document, entitled "A Framework for the Implementation of Sustainable Forest Management" was

completed and approved for release for public comments and review. The Code of Forest Practice is part of the department's overall Forest Strategy, and is a government policy that will be mandatory on Crown land. Its use will also be encouraged on private forest lands. The framework document describes the general principles that will be the basis for planning and conducting sustainable forest management operations.

Proposed changes to two sets of regulations under the *Forests Act* were drafted and made public for review. These regulations, the *Registration and Statistical Returns Regulations*, and the *Forest Sustainability Regulations*, govern the commercial buying and selling of wood.

- Provide Support For a Viable and Sustainable Mineral Industry in the Province

The Department provides programs and services that support the province's mineral industry. Significant progress was made on several initiatives aimed at a rejuvenation of this significant foundation industry.

Protracted negotiations between the department and Natural Resources Canada / Cape Breton Development Corporation (CBDC) continued throughout 2002-2003 regarding the conditions necessary for the province to accept the surrender of the CBDC Special Lease (coal) 90-2. A number of issues were successfully resolved during this time. CBDC agreed to provide all resource information regarding remaining coal resources to DNR staff on a confidential basis to allow preparation of tender documents (to be used to tender coal leases to private sector coal mining companies) in advance of surrender of the lease. CBDC agreed to facilitate access to their land by future coal operators and to consider a Memorandum of Understanding (MOU) regarding mechanisms for determining access. Discussions with the Cape Breton Regional Municipality Police Services resulted in agreement that they will address illegal mining under the Criminal Code on a complaints basis. CBDC have accepted responsibility for environmental liabilities on sites they actively operated since 1967. In addition, a MOU has been agreed to and signed by the CBDC Board of Directors and the Minister of Natural Resources setting out a process for assessing the environmental liabilities of sites on CBDC-owned land that were operated by predecessor companies prior to 1967. The process will be monitored by a steering committee which includes one member from the department.

The department carried out a wide range of geoscience programs during the year, including geological mapping in southwest Nova Scotia, northern Nova Scotia and southeast Cape Breton Island. Considerable effort was devoted to emerging opportunities for limestone and marble development in Cape Breton Island, and to encouraging new gold exploration in eastern and southern Nova Scotia. Significant accomplishments include:

- Completion of bedrock and surficial mapping in the Targeted Geoscience Initiative (TGI) project in southeastern Cape Breton and release of 1:50,000 bedrock and surficial maps for two map areas;

- Significant advancement in understanding of location, quality, and marketability of carbonate resources in the TGI area;

- Identification and promotion of newly discovered clay resources in southeastern Cape Breton;

- Release of final results of an aggregate resource inventory for Halifax Regional Municipality; and

- Release of a comparative study of Joggins *vis a vis* other sites world-wide as a World Heritage Site representing the coal age. Scientific work and discussions with Parks Canada aimed at ensuring that the Joggins site remains on the Federal Government's tentative list of potential sites led to identification of the Joggins site by the provincial government as its highest priority natural property for World Heritage Site designation.

The department continued to communicate with the Department of Environment and Labour regarding completion of the *Underground Mining Regulations*, which will open the door for proclamation of the amendments to the *Mineral Resources Act* and to provide input to the process as needed. The amendments were nearing completion at year end.

A collaborative effort between DNR and the Office of Economic Development (OED) to develop a strategy to promote Nova Scotia's mineral resources, and to cooperate in implementation of the strategy, was announced by the Minister of Economic Development at the *Mining Matters for Nova Scotia* conference held in the fall of 2002. Initial discussions identified the existing Mineral Policy as an appropriate starting point for the new strategy. This plan will be implemented by a joint DNR/OED team beginning in 2003-04.

Work on a business plan for the automation and functional updating of the Mineral and Petroleum Rights Registry did not proceed during 2002-03. The primary reasons this did not occur were a protracted staff vacancy in the Registry, coupled with significant operational demands on the remaining staff as a result of Petroleum licence calls and Treasure Trove applications. The business plan has been deferred to 2003-04, to the extent that resources will allow.

The One Window process for reviewing, permitting, and monitoring mineral development projects, a cooperative effort between the departments of Natural Resources, and Environment and Labour, continued to operate efficiently through the year. The One Window standing committee met 12 times during the year to discuss activities in the mining industry, and met with mining and mineral development companies on six other occasions to discuss new development proposals. The committee also reviewed two environmental assessment registrations and applications for two approvals or permits.

- Continue Integrated Resource Management Planning on Crown Lands

Crown lands account for just over one quarter of the province's land mass. Integrated Resource Management, or IRM, is the department's approach to making land-use decisions for Crown land that incorporates the broad range of resource values and land uses on Crown lands. IRM enables DNR to take into account the relationships between the various land uses and resource values, and the effects of management practices and decisions on these uses and values. IRM consists of two components:

- a planning component which identifies known resource and land-use values, sets goals and objectives, and provides management frameworks for geographic areas of Crown land; and,

- a process to review information and making management decisions.

During 2002-03, the department initiated a Long Range Management Framework (LRMF) Pilot Project in the Mulgrave Plateau ecodistrict (in Guysborough County). This included developing and approving the Terms of Reference for a Regional Public Advisory Committee (PRAC), and the Criteria for Membership on the Committee. Twelve potential PRAC members were selected and their membership was approved by the department in late 2002. The initial meeting of the PRAC was held in February 2003, and a second meeting was held in March.

The document "*Guidelines for Development of Long Range Management Frameworks for Integrated Resource Management* "was completed and published by the department. This document (43 pages) is publicly available as "DNR Manual 2003-1"; it provides direction to DNR staff, the Regional Public Advisory Committees, and others for developing the LRMFs for the province's 39 ecodistricts. (Note: In the 2002-2003 Business Plan, there was a reference to 38 ecodistricts. This number has increased to 39 as a result of Sable Island being classified as a separate ecodistrict.) The *Guidelines* define and describe: LRMFs and their role in IRM planning; required components for setting management targets for Crown land in the ecodistricts; and LRMF development, decision making, and approval processes.

Planning for Crown land management requires that the department have up-to-date information on land uses and resource values for parcels of Crown land; this is particularly so during the development of a LRMF. Phase 1 of IRM included compilation of a database of known land use and resource values for all Crown land. As part of the Mulgrave Plateau Pilot Project staff sought additional and new information on land use and resource values in the Mulgrave Plateau; this included assisting the tourism and heritage divisions of the Department of Tourism and Culture in their studies for tourism potential, and potential sites of archaeological and palaeontological significance on Crown land in the Mulgrave Plateau.

Once an assessment of the Pilot Project has ben undertaken the LRMF process will be initiated in other LRMFs. The LRMF Pilot Project in the Mulgrave Plateau is complex and involves new challenges. Establishing and working with a public advisory committee, the development of the LRMF planning process, and building new working relationships for staff take time and involve many complexities. Combined with the fact that Nova Scotia has unique Crown land issues, the LRMF process is providing a 'made-in-Nova Scotia' approach to Crown land management. DNR's target for 2004-05 is for 50% coverage of Crown land with Long Range Management Frameworks in place. It appears that this target is overly ambitious and will not be reached. One reason why is that these framework documents provide management directions for a minimum time frame of 20 years. The department strongly feels that, during the Pilot Project, completeness and participant comfort are more important than speed, since decisions made as part of these LRMFs will have implications for the Crown land covered by the frameworks for decades to come.

•• Provide an Effective Parks and Recreation Program

The department supports the planning, design, development and operation of more than 120 camping and day-use parks, in addition to providing trails and other outdoor recreational opportunities on Crown land.

During 2002-03 the province acquired Cape Split (280 hectares), Dunns Beach (16 hectares with a protected beach), and Second Lake of Law (40 hectares). These acquisitions will support the continued development and enhancement of the department's parks and recreation program.

Department staff, along with the McNabs and Lawlor Islands Provincial Park Advisory Committee, prepared a draft management plan for the proposed McNabs and Lawlor Islands Provincial Park. The draft plan was released to the public in August 2002 for review and to solicit comments. Three public open houses were also held in October 2002 to collect public input on the draft park management plan. The department met its commitment to designate one natural environment provincial park under the *Provincial Parks Act* in 2002-2003 with the designation of McNabs and Lawlor Islands as a provincial park in November 2002. These properties possess significant natural and cultural values and provide opportunities for recreational and educational activities within the heart of the province's largest metropolitan area.

Several initiatives aimed at improving the environment were introduced into the provincial parks system during the year. Through a partnership with the Resource Recovery Fund Board (RRFB), a waste management strategy was introduced into the provincial park system in selected provincial campgrounds. At these locations, garbage cans were replaced with four stream recycling containers and organic carts. The goal was to reduce unsorted waste being generated in the provincial parks, and to support provincial objectives for solid waste diversion. The program also sets a positive example for other public-use situations. The intention of another initiative was to improve air quality. An alternative firewood product (pellet logs) was piloted in provincial campgrounds as a replacement for regular firewood and has had positive results. The re-manufactured wood product material is shaped into small logs which, when burned, produced low smoke emissions and less sparking. The logs are being produced by a Nova Scotia company and are expected to have a positive impact on reducing smoke and particulate matter emissions within our provincial campgrounds.

The department delivered the "Parks are for People" program, for the 14th year, in cooperation with numerous community and volunteer groups. A total of 126 events, which attracted an estimated 26,500 participants, were conducted in parks across the province. An additional seven events were organized to commemorate the 12th National Parks Day. Our Campground Hosts program, which uses volunteers to assist park staff by meeting and greeting campers, helping orient them to the park, providing information about the park, and monitoring facilities in the park, was provided in 10 provincial parks during the 2002 camping season. Seventeen hosts participated in the program and provided 58 weeks of volunteer services to campground visitors. A park staff training plan, with a goal of improving park visitor services levels, was developed and delivered to the department's seasonal parks staff.

•• Conserve Wildlife and Wildlife Habitat

During the year, four species were added to the endangered species list and will be protected under the *Endangered Species Act*. These were the Canada Lynx, Bicknell's Thrush, Redroot and the Atlantic Whitefish. Revised recovery plans were completed for the Roseate Tern and Blanding's Turtle. The Cape Breton marten recovery plan was completed and implementation of the plan began. Outside funding amounting to $75,000 was secured, to be used to aid this species' recovery.

The department co-hosted, with the Biodiversity Convention Office, a workshop for biodiversity scientists in Atlantic Canada. This workshop provided content for the National Biodiversity Science Agenda. Staff also made a presentation on the implementation of the Canadian Biodiversity Strategy to the joint meeting of the Councils of Resource Ministers for the Federal / Provincial / Territorial Biodiversity Working Group. In addition, staff completed the general status of more than 1,600 species of vascular plants, and co-chaired the national working group on the general status of wildlife.

Monitoring of the abundance and harvest of game species was completed. The results of the monitoring effort were used in a review of the hunting / trapping regulations under the *Wildlife Act*. The number of permits available for the 2003 antlerless deer hunt was reduced by 1,000 due to a decline in the estimated deer population as a result of severe winter conditions.

A zone management system was introduced for the annual Cape Breton moose hunt, with implementation scheduled for the 2003 season. The two-week season per license was replaced with two separate non-overlapping seasons, with each of these being one week in duration. The number of permits available was increased to 310 from 200. The rationale for this change was to increase both the quality of the hunting experience and the opportunity to participate in this annual hunt.

Several accomplishments were completed related to fur harvesting. A partnership between Atlantic provincial wildlife agencies was finalized to revise and publish a fur harvester education training manual. At a national level, the department was involved, through the Fur Institute of Canada and the Canadian Furbearer Management Committee, in the development and release of the Canadian Trap Certification Protocol, as part of the national effort to implement the Agreement on International Humane Trapping Standards in Canada. These same parties also succeeded in reaching agreement with the federal Department of Foreign Affairs and International Trade for a Canada-European Union international student internship program to promote international understanding of North American science-based wildlife management.

The maintenance and updating of the GIS database of significant wildlife habitat and species is ongoing. Staff responded to numerous requests for information from government and private agencies.

The department and its partners in the Eastern Habitat Joint Venture (EHJV) delivered almost $900,000 to the wetlands conservation program in Nova Scotia. One component of this program is to secure wetland and adjacent upland habitat. A total of 361 acres (146 hectares) were acquired through donations and purchases; an additional 171 acres (69 hectares) were brought under landowner agreements. A

wetland to treat agricultural wastewater was constructed to protect water quality and enhance 2½ acres (1 hectare) of wetland habitat. Management activities enhanced the waterfowl habitat on an additional 53 acres (23 hectares) of wetland.

The department collaborated with the Canadian Space Agency and other agencies to investigate the use of remote sensing technology and new analytical tools as a cost-effective measure to update our wetlands inventory. The department also worked with our partners in the EHJV and with the Nova Scotia Nature Trust to implement the "NS-NB Bay of Fundy Shorebird Project". Project staff met, both formally and informally, with more than 50 landowners along key beaches and flats used by migrating shorebirds. Finally, the department supported, along with our other EHJV partners, a PhD candidate in a multi-year research project on grassland bird demographic and behavioral responses to agroecosystem management in Nova Scotia. The results from this project will assist future habitat management and conservation initiatives of the EHJV in the agricultural landscape throughout Atlantic Canada.

Nine projects focusing on wildlife conservation were approved and received funding totaling $120,753 under the Habitat Conservation Fund. The Species at Risk Conservation Fund was established in 2002 to support conservation projects for these species.

At the Shubenacadie Wildlife Park, education programs were expanded from the previous year with the implementation of an Outreach Program and participation in the Ducks Unlimited Wetland Education Initiative. These new programs, along with continued improvements to our other on-site programs, has resulted in a 30% increase in participants in the education program.

•• Utilize Department Information and Expertise

Information collected by the department has numerous applications that benefit Nova Scotians. Many priorities for 2002-03 related to the use of natural resources-related knowledge and information. The department continued to provide information for the sound management of the province's natural resources to ensure their optimum use for the benefit of Nova Scotians.

The department continued to expand the range and variety of geoscience and mining information available on our website, with the addition of more than 100 new maps and documents. Two conference websites were established during the year. Substantial effort was devoted to preparing information and documents reporting results of the Targeted Geoscience Initiative project schedule for release on the website early in 2003-04.

Department staff made five presentations to Regional Development Authority (RDA)-sponsored public meetings and community groups on the importance of mining and geoscience. In addition, a MOU was completed with Strait-Highlands RDA to cooperate on the provision of information and advice regarding mineral development, and cooperative projects related to carbonate development in Cape Breton were carried out in partnership with Enterprise Cape Breton Corporation, the Strait-Highlands Regional Development Agency, and the Office of Economic Development. Planning for the reclamation of the Irish Cove limestone quarry in

Cape Breton Island was completed by a committee that included two citizens' representatives from Irish Cove. A Public workshop on the use of clays discovered during the Targeted Geoscience Initiative was held in Cape Breton.

During the 2002-2003 fiscal year, as part of the abandoned mine openings program, remediation work to improve public safety was carried out at a number of locations. Various methods of remediation are used, depending on the site circumstances, including fencing, barricading, capping and backfilling the abandoned mine openings.

Further work was carried out in the Montague area, with an additional 17 shafts backfilled and 17 shafts fenced. In Oldham, through an agreement with a private partner, 33 abandoned mine openings were backfilled during the course of forestry operations in the area. In a residential area of Stellarton, the Carpenter Pit shaft was backfilled and mounded after a hole developed adjacent to the shaft.

The department provided natural resources stewardship related education to thousands of teachers, students, and members of the public at the Natural Resources Education Centre during 2002-03. During National Forest Week, in May 2002, department staff visited elementary schools throughout the province, to provide tree seedlings and information for teachers and students on biodiversity and forest management.

A number of activities were held aimed at woodlot owners and Christmas tree growers. These included field days, courses, seminars, and the provision of educational materials that focused on the theme of sustainable forest management theme.

Hunter education and bowhunter education were coordinated through the department. These courses provide potential hunters with instruction in a number of areas including firearm safety, wildlife management, hunter ethics and responsibilities, and survival skills.

•• Make the Strathlorne Forest Nursery Financially Self Sufficient

The department operates a forest nursery at Strathlorne, Inverness County. The facility produces tree seedlings for use by the forest industry in silviculture programs carried out under the Forest Sustainability Regulations. Strathlorne supplements the number of seedlings produced by private nurseries and absorbs much of the fluctuations in annual demand.

During 2001-02, the department developed a business / economic plan. A marketing and sales component of the plan was completed in 2002-03, and the department began the implementation of this part of the business plan, aimed at increasing the facility's revenue potential.

For the period from April 1, 2002 to March 31, 2003, the Strathlorne Forest Nursery seeded 10 million tree seedlings (with approximately 8.5 million of these seedling estimated to be hardy enough for sale). Varieties planted included Black Spruce, Red Spruce, White Spruce, Norway Spruce, Red Pine, White Pine, Yew Cuttings,

Balsam Fir, and Bracted Fir. During this period, revenue of slightly more than $1.2 million was generated from sales of approximately 6.8 million seedlings.

•• Participate in National/International Forestry Policy Development

The years 2002 and 2003 were (and will be) a period of significant activity in federal-provincial relations and programming through the Canadian Council of Forest Ministers (CCFM). In addition to being the host province and Chairman of the Council, Nova Scotia will be required to give additional effort and support for project files relating to: a new national forest strategy, the Forest 2020 consultation rounds, review of the Criteria and Indicator framework, and development of a national forest information system. These efforts will culminate with Canada being the host for the World Forestry Congress in September of 2003.

Nova Scotia was the host province and Chair of the Canadian Council of Forest Ministers (CCFM) during 2002. Nova Scotia hosted the annual meeting of Deputy Ministers in June 2002, followed by the annual meeting of Ministers in September 2002. Both meetings were held in Halifax.

Department staff participated on most CCFM national work groups, in several instances as the group Chair or Co-Chair. Several of these work groups held their annual meetings in Nova Scotia during the year. The CCFM made progress on the development of a new National Forest Strategy. DNR submitted reports on progress achieved under the previous Strategy. The department also participated in both the regional, and the national, stakeholder consultation processes in preparation for the National Forest Congress that was scheduled for May of 2003. Development of the CCFM National Forest Information System continued, and the Nova Scotia node of the Internet network was installed during the year.

Planning began for Nova Scotia's contribution to the World Forest Congress scheduled for September 2003 in Quebec City. An exhibit was developed profiling the province's progress and accomplishments towards sustainable forest management.

•• Deliver Enforcement Program Services

During 2002-03 the department actively enforced all Acts and Regulations under its mandate. The first charges were laid under the *Registration and Statistical Returns Regulations* and the *Wildlife Habitat and Watercourses Protection Regulations.* These are regulations under the *Forests Act* and were enacted as part of the department's implementation of the Forest Strategy. The department also conducted investigations on each of the 267 wildfires that occurred in the province during 2002. The effort devoted to enforcing the regulations under the *Forests Act* and from our fire investigations resulted in 36 charges and 131 warnings being issued during 2002-03.

The department carried out a number of Joint Forces Operations (JFOs) with other provincial, and federal departments during 2002-03. One example was Operation Loch Breagh. This was an operation involving staff from the Department of Natural Resources, the Cape Breton Regional Police, the RCMP, Environment Canada, the

Department of Environment and Labour, the Department of Agriculture and Fisheries, Coast Guard Canada, and the Unama'ki Insitute of Natural Resources. The main focus of the operation was to promote safety and educate people on the proposed designation of the Bras d'Or Lakes as a non-discharge zone for sewage. This JFO was driven by the Pitu'paq Partnership and the Sustainable Communities Initiative.

The restructuring of the department's Enforcement Program was completed and has resulted in a more efficient delivery of the program. The restructuring includes processes for detailed work planning on enforcement problems that focus on prevention, problem-solving, and partnerships.

•• Provide Forest Protection Services

The department is responsible for managing wildfires in all areas of the province except incorporated towns and cities and federal lands. DNR carries out a range of activities from fire prevention and fire detection to fire suppression when necessary. Staff require extensive training in order to be able to safely fight forest fires.

A review of the forest fire management program was started to assess the strategic direction of the program, and areas for improvement. Several client focus group sessions were undertaken as part of the review.

Fire training for staff continues as a major priority for the department. Through the coordination of the Canadian Interagency Forest Fire Centre (CIFFC), all forest fire agencies in Canada have agreed to implement a national Incident Command System (ICS). An extensive training and education program is being developed for implementation by each province and territory.

In addition to providing forest protection services within Nova Scotia, the department responded to several requests for assistance under the Canadian Mutual Aid Resource Sharing Agreement, administered by the CIFFC. Staff assisted with fire fighting efforts in both Alberta and Quebec. The cost of providing this assistance was fully recovered, and staff obtained valuable experience in fighting large forest fires.

The department also provides integrated pest management (IPM) services. A program review was conducted on the IPM program, including consultation with client groups. Results included an internal restructuring of the section, staff reassignments, development of a pest risk analysis system, to more effectively manage insect and disease issues, and increased cooperation between government and non-government agencies.

b) Crown Lands Administration

•• Provide an Up-to-Date and Responsive Legislative Framework

A preliminary review of the history and effectiveness of the *Beaches Act* has been completed, along with a consideration of related policy issues. An examination of legislative and policy regimes in other jurisdictions was begun.

A draft new *Trails Act* was prepared; the key components include a streamlined process for formal registration of community trails and limits on liability for trail operators. By agreement, the Nova Scotia Trails Federation began a consultation process with stakeholders to gather input and suggestions.

•• Improve Opportunities for Land Acquisition

The department's partnership with the Nature Conservancy of Canada (NCC) continued for the third year. Under the agreement the NCC is committed to securing $3 million worth of land in return for government's contribution of $1 million. An application for base funding of $1 million under government's Tangible Capital Assets program was made and approved.

Several significant land acquisitions were completed during 2002-03. One of the province's most significant public land acquisitions in decades, if not ever, was completed in July 2002. The purchase of 280 hectares at the end of the Blomidon peninsula, including Cape Split, for $5 million provides public ownership of one of the province's most recognizable, and spectacular, coastlines and landscapes. The province also acquired 16 hectares of coastline at Dunns Beach in Antigonish County in December 2002 for $390,000. This property is within a protected beach and is an important habitat for birds, including the piping plover, which is an endangered species in Nova Scotia. A total of 225 kilometres of abandoned rail corridor, running from New Minas to Yarmouth, was acquired by the province at no cost. The corridor, previously owned by the Dominion Atlantic Railway, was received from the Trans Canada Trail Foundation, and will be managed by the department and the Sport and Recreation Commission. These lands will be available for the future development of community-based recreational trails.

An application for separate Tangible Capital Assets (TCA) funding to support further land acquisitions of privately owned property lying between the end of the road leading to the trail to Cape Split, and the land purchased by the province at the end of the peninsula, was not successful.

•• Improve Access to Land Information

During 2002-03, Internet access to the Crown Land Cadastral Database (CLCD) was arranged for all staff in the department's Land Services Branch staff, as well as for the 10 Regional Crown land surveyors situated in 10 separate locations throughout the province. Also, initial steps were taken to scan the old grant documents in the Provincial Crown Lands Records Centre into a digital format, which will provide enhanced document safety and improve client access to the information.

•• Undertake Crown Lands Administrative Services

The department carried out numerous activities related to the acquisition, disposal, and leasing of Crown lands. These activities were carried out pursuant to a number of statutes. Boundary lines were also established and maintained. To maintain information on government land holdings, we operate the Provincial Crown Lands Records Centre.

The department provided land services to a wide range of government and non-government clients. Service was negatively affected by high demand, the unpredictable nature of the work, and limited resources. Internally, staff carried out normal operational activities that supported the department's responsibilities related to the administration of the province's Crown land base. Examples include the establishment and maintenance of Crown land boundary lines throughout the province, and the operation of the Provincial Crown Lands Record Centre.

c) Infrastructure and Support Services

- Replace the Helicopter Fleet

The department operates a fleet of five helicopters (four light category and one medium category) that are essential for activities related to protecting our forests from fires and for wildlife management. In January 2003 the department took delivery of a new light category MD 500E helicopter as a replacement for the oldest helicopter in the fleet, a 1984 Hughes helicopter that was obtained by the department from the Nova Scotia Power Corporation in 1990. The cost of the new helicopter was approximately $1.3 million Canadian, including the value of the trade-in of the Hughes helicopter.

- Transfer the Integrated Mobile Radio System

The official transfer of the administration and control of the infrastructure, maintenance, and engineering contracts associated with the Integrated Mobile Radio System to the Trunked Mobile Radio office, which is the responsibility of Transportation and Public Works, was completed in November 2002.

- Provide Ongoing Corporate Services

Central support services is comprised of many internal support functions. Each of these particular groups has a number of internally focused priorities that support the ongoing operation of the department in an efficient and effective manner. Various initiatives in the areas of human resources, financial, information technology, legal, planning, information management, and administrative services were completed during the year.

5. Financial Results

The department's 2002-03 net program expenditures estimate (after chargeables, fees and recoveries) was $57.0 million. Actual expenditures for the same period were $55.3 million. This marked the fifth consecutive year the department stayed within its budget.

The main reasons why the department was able to stay within its budget were:

- savings obtained from unfilled vacant positions;
- transfer of the radio system to Transportation and Public Works;
- under expenditure in equipment, repairs and maintenance in air services;
- a decrease in the cost of office rentals; and
- reduced on-the-ground silvicultural work.

Department of Natural Resources
Financial Results - 2002-03

Program and Services	2002-03 Authority ($'000)	2002-03 Forecast ($'000)	2002-03 Actual ($'000)	Actual / Authority Variance ($'000)
Senior Management	514.0	514.0	475.8	(38.2)
Corporate Services Unit	6,432.0	6,122.0	6,194.0	(238.0)
Renewable Resources	8,362.0	8,342.0	8,293.9	(68.1)
Minerals and Energy	3,603.0	3,577.0	3,599.6	(3.4)
Regional Services	28,649.0	28,461.0	27,784.2	(864.8)
Planning Secretariat	4,146.0	4,003.0	3,818.6	(327.4)
Land Services	2,090.0	2,155.0	2,030.6	(59.4)
Resource Enhancement Fund	3,232.0	3,192.0	3,093.4	(138.6)
TOTAL	57,028.0	56,366.0	55,291.0	(1,737.0)

Budget figures are presented based on the department's organizational structure.

Components may not sum to the totals due to rounding.

In the Variance column, negative numbers are under expenditures.

During 2002-03, each of the department's branches was able to come in under budget.

6. Performance Measures

The department has identified a number of performance measures that can be used to help track our success in meeting our goals. Performance measurement is an evolving process and over time we expect that we will be continually improving our performance measurement system. We anticipate we will periodically be replacing existing measures with better measures, and that we will be refining and enhancing existing measures. Information explaining each of our measures and the results achieved can be found at http://www.gov.ns.ca/natr/outcomes.

7. Supplemental Information

During 2002-03, the department had broad responsibilities for the development, management, conservation and protection of forest, mineral, parks and wildlife resources, and the management of Crown lands. Nova Scotia's natural resources provide significant economic, social, cultural and environmental benefits for all Nova Scotians, especially to rural parts of the province. Our natural resources are one of the province's features that make it an attractive place to live, do business in, and visit. It is our responsibility to ensure that they are managed wisely and that Nova Scotians recognize their value and importance.

The following two tables show Statistics Canada's estimates of average weekly wages for all employees in various sectors for 2001 and 2002. The first table shows earnings from industries related to forestry and mining, using the North American Industrial Classification System (NAICS). For comparative purposes, the second table provides earnings data for some other industries. The figures provided in these tables provide evidence of the relatively high levels of pay enjoyed by workers in the resources sector, compared to earnings in other sectors.

Table 1 - Estimates of Average Earnings (Including Overtime), All Employees (Industries Related to Forestry and Mining Production, Manufacturing and Distribution)

NAICS	Industry	2001	2002
1133	Logging	$603.19	$636.31
212	Mining	$856.53	-
2121	Coal Mining	$858.73	-
3211	Sawmills and Wood Preservation	$596.65	$613.59
3221	Pulp, Paper & Paperboard Mills	$1,075.12	$1,047.07
3273	Cement & Concrete Products Manufacturing	$763.88	$792.28
3279	Other Non-metallic Mineral Product Manufacturing	$715.53	-
4163	Lumber, Millwork & Other Building Supplies Wholesale-Distribution	$753.52	$694.70
4172	Industrial Machinery Equipment & Supplies Wholesale-Distribution	$765.15	$804.88
4182	Paper, Paper Products & Disposable Plastic Product Wholesale-Distribution	$786.43	$743.20

Source: Annual Estimates of Employment, Earnings and Hours, 1991-2000, Statistics Canada and Table 281-0027 - Average weekly earnings (SEPH) from CANSIM.

Table 2 - Estimates of Average Weekly Earnings (Including Overtime), All Employees (Professional, Educational, Health Care, Culture / Tourism Related, Public Administration)			
NAICS	Industry	2001	2002
54	Professional, Scientific & Technical Services	$778.28	$795.76
61	Educational Services	$653.34	$697.12
62	Health Care & Social Assistance	$555.00	$581.66
711	Performing Arts, Spectator Sports & Related Industries	$321.51	$338.30
712	Heritage Institutions	$385.71	$388.68
721	Accommodation Services	$288.99	$286.80
722	Food Services & Drinking Places	$234.29	$240.42
911	Federal Government Public Administration	$906.66	$991.68
912	Provincial & Territorial Public Administration	$651.40	$684.89
Source: Annual Estimates of Employment, Earnings and Hours, 1991-2000, Statistics Canada and Table 281-0027 - Average weekly earnings (SEPH) from CANSIM.			